THE DELAWARE AND HUDSON RAILROAD BULLETIN

SUSQUEHANNA RIVER
NINEVEH, N.Y.

JUNE 1, 1934

Lovely Things of Life

THE lovely things of life are strewn
Along our path each day;
From marble, wood and stone are hewn,
Some molded out of clay.

The fragrant, crimson-tinted rose,
Swayed by the gentle breeze,
A stream that murmurs as it flows
On to the deep blue seas.

Dawn of day as it floods the sky;
Or sunset's golden glow;
The hush of twilight, drawing nigh,
And music sweet and low.

But best of all the lovely things
That come along our way,
Are those that cheer and gladness bring
To make the sad heart gay.

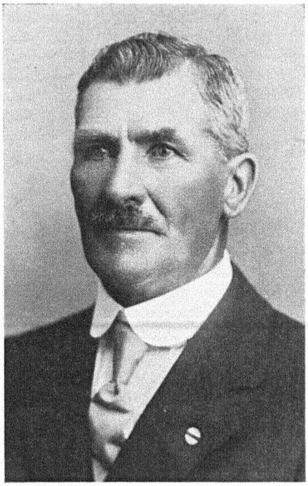
A kindly word, a friendly smile,
The warm clasp of a hand,
These are the lovely things worth while
To scatter through our land.

—ETHEL TITUS WORTHEN.

"the D&H" The DELAWARE AND HUDSON RAILROAD "the D&H"
CORPORATION
BULLETIN

Heads Gravity Association

Veteran's Railroading Career Began on Inclined Plane



GEORGE LORENZ

A MAN had to have sound judgment, a keen eye, and nimble fingers to hold a job at the head of a plane on the old Gravity Railroad," says GEORGE LORENZ who, prior to his retirement on pension June 1, 1932, had completed over 56 years in Delaware and Hudson employ. When a string of five loaded coal cars reached the top of the long incline, the stationary engineer would give him slack in the steel cable, and in the following instant the headman had to grasp the hook which engaged the cone in the heavy rope, and with a flip of his wrist disengage it. Should he fail to release the big hook he was greeted with a series of remarks from the engineer which were not altogether complimentary, and the latter had to hastily reverse his engine to avoid causing serious damage to the cable, cars, or his engine.

Nowadays, when a freight train stalls on a grade the engineman has a number of alternatives: he can back down and get a fresh start, he can cut the train into sections and take up one at a time, or, if another locomotive is available, he can call for assistance. In the early days if a train, which ordinarily ran down the slope between adjacent planes by the force of gravity, stopped midway between, the runner had to walk to the foot of the next incline to get one of the powerful horses which were stationed there for emergencies of this type. Returning to his train he would start it with the assistance of the horse and then complete the interrupted run. Not infrequently the boys of the neighborhood, who frequently rode the cars along the levels, would deliberately stop a run of cars to annoy the crews. When one of the culprits was caught he was given a sound thrashing, although it is doubtful whether this discipline had any other effect than to cause him to repeat the prank at the very next opportunity.

Even before his birth at Archbald, Pa., July 13, 1865, MR. LORENZ'S family was connected with the mining and transportation of anthracite. His father was for years weighmaster and later breaker boss in the employ of the Jones and Simpson Coal Company, and GEORGE, after a single term of schooling between the ages of six and seven, went to work in the old White Oak Breaker, at Archbald, picking slate twelve hours a day for 42 cents, which rate was later cut to 39 cents per day. All day long dozens of youngsters, ranging in age from six to ten years, sat hunched over a coal chute high in the breaker, slowing the flow of the coal with their feet while they removed and threw into a nearby box any slate or rock they might see. As long as the percentage of refuse which escaped their eyes was kept to a minimum all was well, but should their foreman consider that they were missing too much, their failure was harshly called to their attention by the sting of a falling whip. This colliery, which at that time had a capacity of only about 450 tons a month, long since burned to the ground and was never rebuilt.

After three years as a slate picker young GEORGE was promoted to the job of running empty coal cars under the breaker chutes for loading, his wages automatically being increased to 54 cents per day. A supply of empty cars was at all times available at the head of the slope passing by the breaker and as soon as one had been filled to its capacity of about four tons, GEORGE had to place another one under the chute. Five years later GEORGE, now nineteen years old, was made extra man at the breaker, doing a variety of jobs throughout the day. At times he would drive a mule on top of a mountainous culm bank where the refuse from the breaker was disposed of; at others he would run cars on and off the scales while their contents was being determined by the weighmaster. The coal from this breaker was all sent to Carbondale for use on steam locomotives of the Delaware and Hudson.

Meanwhile GEORGE had made a number of applications for a position on the Gravity Railroad, although in each instance he was refused because of his small size. This only served to intensify his desire to become a railroader, an ambition which had been growing on him ever since the steam railroad had been built through Archbald when he was five years old. Finally Frank Peters, a Gravity section foreman, agreed to give him a trial, and put him to work tending the head of No. 25 plane at Archbald at $1.55 per day.

Work at the head of a Gravity plane was by no means easy and a man worked from 6 a. m. until the last loaded car had passed. If, however, he had to work until 8 p. m. he received an extra quarter, although should he quit as late as 7:59 he received straight time, and the work was usually arranged so that a man did not receive any overtime.

Oftentimes a cable or link would break and a string of cars would start back down the plane, gaining terrific speed in a short distance. To prevent any serious damage at the foot of the plane, traps were built in the track at intervals. These traps consisted of spring switches which were closed by the wheels of an ascending car but immediately opened again behind it, so that any cars descending the plane would be derailed.

After six years at the head of a plane, MR. LORENZ became a "runner," operating trains of Gravity cars between Archbald and Carbondale. In the morning he would leave the foot of "D" plane with anywhere from 5 to 85 cars. At the foot of each succeeding plane he divided his train into sections of five cars each for hoisting to the top, and he rode up on the last group. The entire train had to be coupled up again for the down-grade run to the foot of the next slope. Thus he worked his way to Carbondale and back three times to complete a day's work, for which he received $1.90.

MR. LORENZ continued on the Gravity until it was abandoned in 1899 when he was transferred to the foot of the trainmen's roster on the Pennsylvania Division. For a number of years he was a member of Conductor Wallace Dimock's crew which transferred freshly mined coal from Powderly and No. 1 collieries to the Racket Brook Breaker, where it was prepared for marketing.

For five years, between 1909 and 1914, MR. LORENZ was on a Hudson-Oneonta fast freight run, going north one day and back the next. At that time it took an average of 16 hours to take a train of from 45 to 50 cars from Hudson to Oneonta with what would correspond to the present 700-class engines; today twice as many cars cover the same route behind a 1200-class locomotive in less than 6 hours. MR. LORENZ completed his 56 years in Delaware and Hudson employ as a yard conductor at Carbondale.

Veterans are often asked which they preferred, work on the Gravity or the steam road. MR. LORENZ is unqualifiedly for the steam road since a man who went out on a steam-hauled train knew beforehand just what type of work he would do that day; on the gravity a man might work on a train or plane one day and be set to work tamping ties the next.

MR. LORENZ is a charter member of The Delaware and Hudson Veterans' Association and has served as a vice-president since its organization. For fourteen years he has been president of the Pennsylvania and Delaware and Hudson Gravity Association, which is composed entirely of men who worked on Gravity Railroads and which holds an outing each year at Scranton. He is also a member of the Independent Order of Odd Fellows and the Lutheran Church of Archbald.

MR. LORENZ, who lives at 108 Monroe Street, Archbald, has four children: Mrs. Henry Marcom, Mrs. Arthur Miller, and Miss Ethel Lorenz, of Archbald, and Elmer Lorenz of New York City.

American Railroad Development

Part II — Locotives

THE beginnings of the American railroad are more or less clouded in the shadows of the past. Yet through these certain dim images of reality arise. In them one sees John Stevens, of Hoboken, N. J., running a curious small experimental steam-propelled locomotive around a circular track laid in the grounds of his mansion overlooking the Hudson. Gridley Adams putting down three miles of rail at Quincy, Mass., over which to bring great granite blocks from the quarry to tidewater with which to build the new Bunker Hill Monument in Charlestown, just outside of Boston. That was in 1826 and the steam locomotive was unknown to Gridley Adams, but not so to Horatio Allen, who that year crossed the Atlantic to buy a little steam locomotive, the *Stourbridge Lion*, which he brought by river barge and canal up into the hills of northeastern Pennsylvania. There, at Honesdale, on August 8, 1829, the *Lion* turned its wheels under its own steam on the track of The Delaware and Hudson Canal Company and so became the first practical steam locomotive ever to operate on American soil.

The images multiply, become all the while more and more distinct. Here is Peter Cooper building his curious little *Tom Thumb*, with its upright boiler stuffed full of rifle barrels for flues, to demonstrate to the proprietors of the Baltimore and Ohio Rail Road that steam, and not horse, is the motive power they really need for their ambitious project; which is to extend from the seaport town at the head of Chesapeake Bay to the waters of the inland Ohio, 300 miles distant. And here is David Matthews and the West Point Foundry in the city of New York building the *Best Friend* to send down to the Charleston and South Carolina Railroad in South Carolina and then the *DeWitt Clinton* to go north, up the Hudson to Albany where it is to run upon the Mohawk and Hudson Railroad, cutting off a tedious and time-taking link upon the still-new Erie Canal, between Albany and Schenectady. The *John Bull* comes from England to run upon the Camden and Amboy

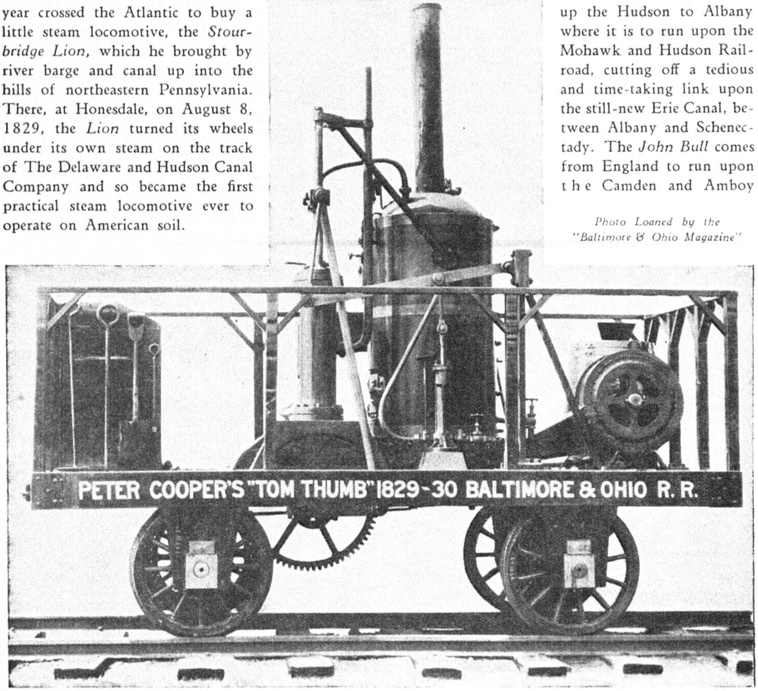
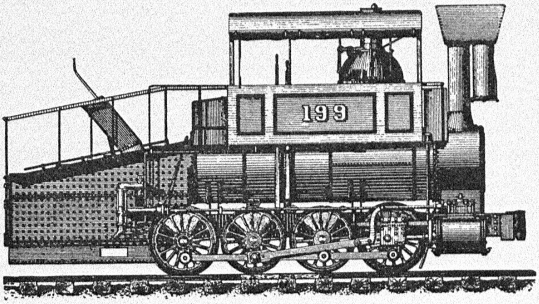


Photo Loaned by the "Baltimore & Ohio Magazine"



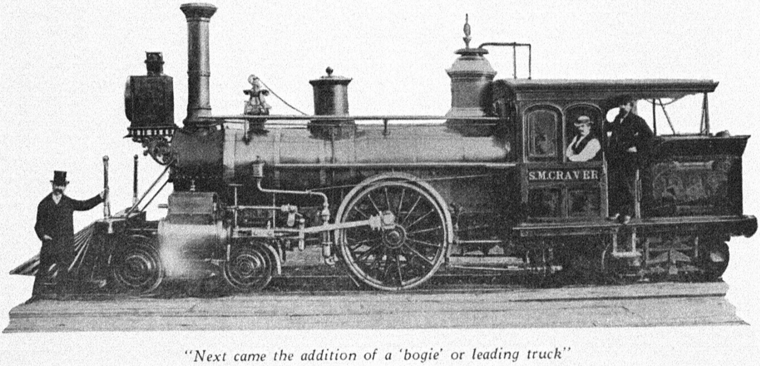
The last of Ross Winans' Camel-backs. (Built in 1863)

over in New Jersey and the *Herald* to operate upon the Baltimore and Susquehanna and still the year is but 1831.

Fired by the steady importation of British locomotives, American ingenuity rises to a supreme test. Curiously enough, watchmakers become good engine builders. Phineas Davis up in York, Pa., builds the *York* for the Baltimore and Ohio and it is an amazingly good little engine. Matthias Baldwin is another watchmaker—in the old city of Philadelphia. He fashions *Old Ironsides* for the young railroad leading up to Germantown and Norristown and so successful it is from the outset, that the foundations of an outstanding American business are at once laid. Other locomotive builders come into the picture. William Norris, also of Philadelphia, is one of these. He builds the *Black Hawk* for the new railroad from Boston to Providence and a little later, the astounding *George Washington* which upon the steep grade of the inclined plane of the Philadelphia and Columbia Railroad, from the bank of the Schuylkill draws a loaded car to the top, with apparent ease. These early locomotive builders begin to learn their trade.

Davis (who was doomed to an early tragic death upon one of his own locomotives) and Baldwin and William Norris soon were followed by others. Richard Norris, of Philadelphia; Ross Winans, of Baltimore; Eastwick and Harrison, of Newcastle; Thomas Rogers, of Paterson; Henry R. Campbell, of Philadelphia, and still others. A fine new industrial trade was being firmly established here and the importation of locomotives from across the Atlantic ceased.

The primary aim of these early engine builders was to make their small craft operate. Hardly had this been done, however, before there was steady and persistent effort to achieve the refinement of the



"Next came the addition of a 'bogie' or leading truck"

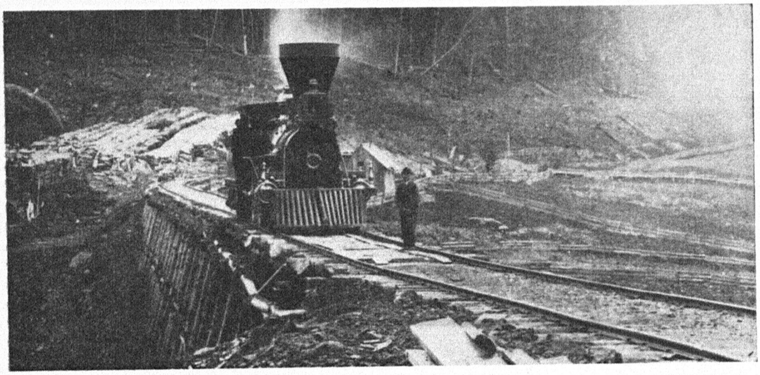
machine itself —to make the steam locomotive in the United States a more efficient and a more valuable creature.

Much had to be done. The crude early type of upright boiler was the first thing to be discarded. The absurd contention that a longitudinal boiler would so tilt the water on steep grades that the engine would not steam well was quickly laughed away; and the longitudinal boiler adopted. Next came the addition of a bogie or leading truck for the locomotive frame and close upon it a housing for the engineer and fireman—soon to become known as the cab. Headlights, whistles and bells followed. Improvements in wheels and in tires were devised; springs adopted, to break the force of jars and shocks. In those early days of the American railroad another locomotive device became urgently necessary: The engines of that time, almost universally burned wood as fuel and sent out an astonishing amount of sparks, which set fire to barns, haystacks and the like and so wrought a general devastation to the countryside. So came the spark arrester.

More important than all of this was the increasing of the efficiency of the locomotive; the steady adding to its pulling power. For a good many years this was done chiefly by increasing the size of the engine, itself—until, fifteen or twenty years ago, the absolute limit in the width, height and length of the American locomotive—factors limited by the curvature and clearances of bridges and tunnels—was reached. And the further improvement of the machine became entirely intensive.

Yet, away back in the thirties, they were trying to make the steam locomotive a better machine, without merely adding to its size and weight. Thomas Rogers, who was to found the Rogers Locomotive Works of Paterson, N. J., began to substitute driving wheels of hollow cast iron for wooden wheels with iron tires, which had been used up to that time. At the same time he introduced the use of weights upon the wheels to counterbalance the momentum of reciprocating parts. This was followed, in 1837, by an invention of Joseph Harrison—by which the weight of the engine was, by means of a system of equalizing levers, distributed evenly to the axle boxes. In a sketch which he wrote of locomotive development in the United States at about that time Harrison said:

"Mr. Henry R. Campbell, of Philadelphia on February 5th, 1836, secured a patent for an eight-wheel engine, with four driving wheels connected, and a four-wheeled truck in front, and James Brooks, of Philadelphia, built for him such a machine, completing it May 8th, 1837. This was the first eight-wheeled engine of this type, and from it the standard American locomotive of today takes its origin. The engine lacked however one essential feature; there were no equalizing beams between the driving wheels, and nothing but the ordinary steel springs over each journal of the driving axles to equalize the weight upon them. It remained for Messrs. Eastwick and Harrison to supply this deficiency; and in 1837 that firm constructed * * * a locomotive on this plan, but with the driving axles running in a separate square, connected to the



"A high, large, top-heavy chimney, with a cumbrous spark catcher * *"*

(*Continued on page 91*)

Highway Freight Trains Taboo

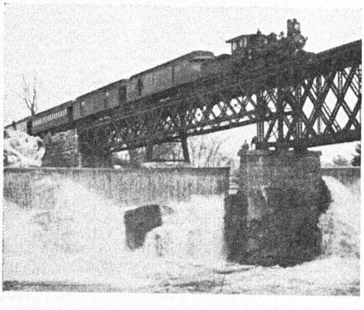
New Law Limits Length of Trucks to 50 Feet

THE permissible length of motor trucks and truck-trailer combinations, registered in any other state, which operate on the highways of New York, will be cut from 65 to 50 feet if a bill introduced by Assemblyman Oswald D. Heck, which passed both houses during the last session of the New York Legislature, is signed by Governor Lehman, Mr. Heck told the Delaware and Hudson supervisors of the north end of the Susquehanna Division at their third get-together, held in the Knights of Columbus' Hall, Schenectady, Thursday evening, May 10. (Governor Lehman signed the bill referred to by Mr. Heck.—Ed.)

Prior to 1932 truck-trailer combinations were permitted to be 85 feet long. In that year the legal length was cut to 65 feet, which will be further reduced to 50 feet provided Governor Lehman signs the bill now before him for consideration. Investigation developed that should this law be made effective immediately with reference to New York State trucks, it would mean the virtual confiscation of $3,000,000 worth of oil, milk, and automobile transport trucks. Their owners are therefore given until February 1, 1938, to wear out the existing units; thereafter the 50-foot limit becomes effective.

This bill is not unduly harsh for in Massachusetts no truck or combination may exceed 28 feet in length; Connecticut permits them to be 40 feet; while in New Jersey the limit is 56 feet.

"There was a time under the old law," said Assemblyman Heck, "when two or three trucks coming from Massachusetts and bound for the west would stop at the New York boundary and load the merchandise of the entire three trucks into one truck and trailer combination for transportation through our state. The reverse would be the case when these gigantic "freight trains" from the west reached the boundary of Massachusetts.



Old Days on the R. & W.

"Attempts have been made at various sessions of the legislature to place these companies engaged in the transportation business under the jurisdiction of the Public Service Commission where they actually belong. Laws are passed to protect the general public but even today it happens time and time again that drivers of large trucks and busses compelled to maintain fixed schedules will be so overworked with long hours of service that they fall asleep, and in that case they are a menace, not only to themselves, but more particularly, to other persons using the roads.

"The other factor that would enter into a discussion of this nature is that of taxation. No one can deny that, considering the use and wear and tear to which they subject the highways of the state, these overloaded truck and trailer combinations do not pay their proportional share either directly or indirectly, and this is particularly true of those concerns that enter New York from other states. Too often these trucks carry their own gasoline so as not to pay the gasoline tax in the State of New York while at the same time using our highways built by our money for their own selfish and private interests. The time is coming when the federal government will take drastic steps to place them under the jurisdiction of the Interstate Commerce Commission where they should be, while those engaged in intra-state commerce will be placed under the jurisdiction of the Public Service Commission.

"In regard also to permissible weights the State of New York has been notoriously lax. North Carolina permits only 10,000 pounds per axle. Other states have successively higher limits till we come to New York with 22,400 pounds. When we consider the allowable gross weight for a 4-wheeled truck with pneumatic tires based on a 148-inch wheelbase 40-60 distribution, Texas is lowest with 7,000 pounds net. Florida follows with 16,000 pounds, New Hampshire with 20,000 pounds, Pennsylvania with 26,000, Massachusetts and New Jersey with 30,000, Connecticut with 32,000, and the second highest of all is New York which permits 36,000 pounds, or in other words 18 tons.

"It does not require much imagination to discover what happens to state highways when they are subjected to the constantly recurring pressure and weight of vehicles that weigh 11, 18 or 22 tons. New York State should get in line with some of its more progressive neighbors in this regard and I can assure you that at the next session of the legislature if no one else introduces a bill that will reduce the total weight of these gigantic vehicles between 25 and 35 per cent I shall.

"In line with this policy of stricter regulation I would prophesy that busses carrying passengers for long distances will also be subjected to further regulation. I understand that the general rule now requires busses not to go over 40 miles an hour but time and time again many of us have followed some of these vehicles that were registering between 55 and 60 m. p. h. The way to stop these leviathans of the road is to have placed on their motors sealed governors which prevent them from going over 40 m. p. h., and steps will soon be taken to bring this to pass."

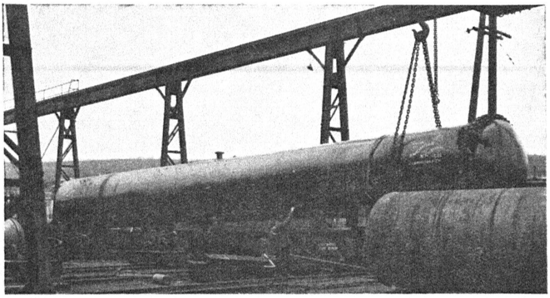
Preceding Assemblyman Heck's address a chicken dinner was served, followed by a program of entertainment which included orchestral music and a boxing exhibition. Edward S. Carl, Car Foreman at Glenville, introduced the toastmaster, Joseph Haley, who in turn presented the speakers of the evening. In addition to that of Mr. Heck, short talks were made by Arthur J. Sheehy, Asst. Trainmaster, Oscar Suprenant, Roadmaster, Edward Knight, and Fred Webster, who gave a most interesting talk on Mothers' Day and the various stages through which woman was elevated from the position of being the personal property of her husband to equality with him at the polls and in business.

Nevertheless—!

JOHN K. Williamson, American author, has received the prize rejection slip of his writing career from a firm of Chinese publishers.

"We read your manuscript with boundless delight," wrote the Chinese firm." By the sacred ashes of our ancestors we swear that we have never dipped into a book of such overwhelming mastery. If we were to publish this book it would be impossible in the future to issue any book of a lower standard. As it is unthinkable that within the next ten thousand years we shall find its equal, we are, to our great regret, compelled to return this too-divine work and beg you a thousand times to forgive our action."

Giant Tank Moved via D. & H.



A GIANT steel tank, 80 feet 10 inches long and weighing 88,000 pounds recently left the plant of the American Welding Company, at Carbondale, Pa. over the Delaware and Hudson for movement to Augusta, Ga. This tank, all the seams of which were welded, is to be used to creosote poles. The poles will be run into the tank on small cars, the huge lid will be sealed, and the poles treated first with steam and later with creosote. It took two days to load and secure the tank on two flat cars after which it left Carbondale with the local freight for transfer to the Pennsylvania Railroad at Hudson. Having negotiated the 14 degree curve in the track at Minooka-Taylor without shifting, it was felt that no difficulty would be experienced moving the big shipment on to its destination.

The

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Vol. 14 June 1, 1934 No. 6

"IF you talk about your troubles
And tell them o'er and o'er,
The world will think you like 'em,
And proceed to give you more."

—PITTSBURG POST.

What "the Boss" Does

THE question as to what work, if any, an executive does, has arisen. This is being discussed more or less seriously (mostly less) in many offices. The best answer we have yet seen appeared in the *Red Book Magazine*. There Mr. F. F. Beirne says:

"Executives are a fortunate lot. For, as everyone knows, an executive has nothing to do. That is, except:

"To decide what is to be done; to tell somebody to do it; to listen to reasons why it should not be done, why it should be done by somebody else, or why it should be done in a different way and to prepare arguments in rebuttal that shall be convincing and conclusive—

"To follow up to see if the thing has been done; to discover that it has not been done; to inquire why it has not been done; to listen to excuses from the person who should have done it and did not do it; and to think up arguments to overcome the excuses—

"To follow up a second time to see if the thing has been done; to discover that it has been done incorrectly; to point out how it should have been done; to conclude that as long as it has been done it might as well be left as it is; to wonder if it is not time to get rid of a person who cannot do a thing correctly; to reflect that the person at fault has a wife and seven children, and that certainly no other executive in the world would put up with him for a moment; and that, in all probability, any successor would be just as bad or worse—

"To consider how much simpler and better the thing would have been done had he done it himself in the first place; to reflect sadly that if he had done it himself he would have been able to do it right in twenty minutes, but that as things turned out he himself spent two days trying to find out why it was that it had taken somebody else three weeks to do it wrong, but to realize that such an idea would have had a very demoralizing effect on the organization, because it would strike at the very foundation of the belief of all employees that an executive has really nothing to do."

Flag Day, June 14th

THE anniversary of the day in 1777 on which the Continental Congress formally adopted the Stars and Stripes as the flag of the United States will be celebrated on June 14th.

The flag of this nation is the result of a process of evolution from a number of earlier standards under which the colonists achieved their independence. The banner in use just preceding the adoption of the present emblem was the Grand Union, which comprised 13 stripes and bore the crosses of St. George and St. Andrew.

By act of the continental congress, June 14, 1777, it was decreed that "the flag of the 13 United States be 13 stripes, alternate red and white," that "the union be 13 stars, white in a blue field, representing a new constellation."

There were 13 stars in the flag during the Revolution, 15 in the War of 1812, 29 in the Mexican War, 33 to 35 in the Civil War, 45 in the Spanish War, and 48 in the World War.

The first display of the new flag probably was at Portsmouth, N. H., where Paul Jones was preparing to sail on the *Ranger*. The young women of that port made a flag, which was flung to the breeze July 4, 1777. By error it contained only 12 stars.

A month later, August 3, 1777, the flag was first displayed before an enemy when a replica of the Stars and Stripes was hurriedly made and raised over Fort Stanwix, near Rome, N. Y., in defiance of the foe.

Still later by a month came the flag's first encounter at sea, when Capt. Thomas Thompson, on the American sloop Raleigh, en route to France, hoisted the new emblem and fired on a British vessel, September 4, 1777.

(Continued on page 94)

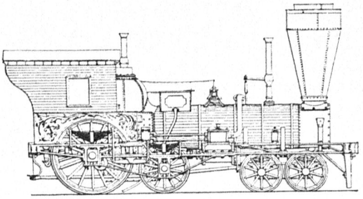
American Railroad Development

(*Continued from page 87*)

main frame above it by a single central bearing on each side. The engine had cylinders, 12 by 18, four coupled driving wheels, 44 inches in diameter, carrying eight of the twelve tons constituting the total weight. Subsequently Mr. Joseph Harrison, Jr., of the same firm, substituted 'equalizing beams' on engines of this plan afterwards constructed by them, substantially in the same manner as since generally employed."

In 1838 a locomotive running between Norristown and Reading, Pa., drew 45 cars, loaded with 150 tons of rails and other iron, 22 tons gross, 41 miles, in three hours and forty-one minutes running time, and this was considered a feat worthy of record among the newspapers of that day. Two years later, an Eastwick and Harrison engine upon the same road beat this record, hauling a freight train of 423 "long" tons (exclusive of the weight of engine and tender) 54 miles in 5½ hours. Locomotive efficiency upon the American railroad was being born.

New geniuses came to replace the pioneers in locomotive construction. Amongst them was another Norris (Edward S.) up in Schenectady, N. Y., already showing a great ability in this form of manufacturing, and he laid the foundation for a locomotive works in that city which has continued until the present day. This Norris built a remarkably fast engine, the *Lightning*, for the Utica and Schenectady Railroad, which, with a single pair of seven-foot drivers, ran 60 miles an hour, with little apparent difficulty. Not far away, the Vermont Central Railroad was advertising a $10,000 prize for a locomotive which could draw a passenger train steadily at 60 miles an hour. Speed as well as power was beginning to be a factor upon the American railroad.

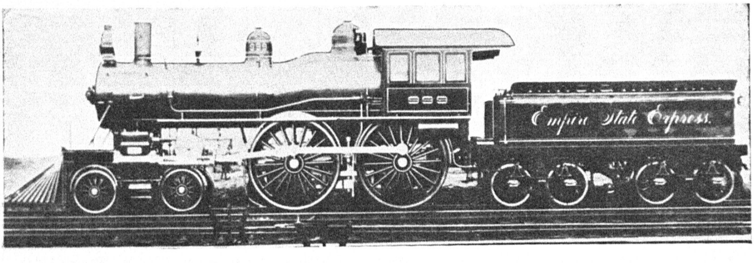


"Gov. Paine" *Courtesy Baldwin Loco. Wks.*

The answer to the Vermont Central's appeal came in the *Governor Paine*, built by Baldwin, of Philadelphia. The *Paine's* drivers were slightly smaller. Norris, of Philadelphia, had built seven engines for the Camden and Amboy Railroad each with a single pair of eight-foot drivers. The *Paine* had 6½ foot drivers. It was inside connected (after British fashion, even to this day) and it was stated that it had been started from a state of rest and had run a mile in 43 seconds. A similar locomotive built for the Pennsylvania Railroad carried President Zachary Taylor mile after mile at the rate of 60 miles an hour.

New England also had its own locomotive builders. At Portland, at Lowell and at Taunton. William Mason, in the last of these cities, was a master builder of the craft. It was to be said of him in after years that, more than any other one man, he was responsible for the general form and outline of the American locomotive, as it has come down to the present day. Mason built for beauty, as well as for efficiency. He gave his engines a graceful distinction as well as real power.

Courtesy N. Y. Central Railroad



Holds Worlds' Record of 112½ mi. per hour

In one thing, however, the American locomotive lagged there in the days of the thirties and the forties: Despite the fact that there had been by the first third of the nineteenth century, a really large development of coal fields in the northeastern portion of the land, the railroaders clung doggedly to the use of wood as fuel. Upon the Reading Railroad, reaching into the very heart of the anthracite district of Pennsylvania, the change from the one fuel to the other did not come until 1849, and then reluctantly. And this was at least eighteen years after Peter Cooper and Phineas Davis, in their small pioneer engines upon the Beltimore and Ohio, had first begun to burn anthracite, with at least a fair degree of success. An Englishman who came to America just prior to the middle of the last century commented upon the huge "balloon" smokestacks of the wood-burners, saying:

" * * * wood being the fuel used, they are obliged to carry a high, large, top-heavy chimney, with a cumbrous spark catcher, very different from the small, slight chimney of an English engine. It acts against the engine, not only its size, but also by the great leverage the heaviest part, the top, has from the center line of the whole machine."

Both anthracite and bituminous coal were first successfully used on Delaware and Hudson engines in the decade beginning with 1850, although considerable difficulty was experienced in making use of the lattter.

When coal did come, it came quickly, however. It was in the middle of the century and there were then about nine thousand locomotives in use upon the American railroads. It had been demonstrated that a ton of the average bituminous coal was about the equivalent of 1¾ cords of wood and it was cheaper, with wood, at any price, becoming more and more scarce all the while. Upon various roads the change from wood grates to coal began—and continued for nearly twenty years thereafter—until the wood-burning locomotive was practically extinct in the United States, save in certain remote localities where wood was close at hand, and coal far away and expensive.

(To be continued)

Flag Day

(*Continued from page 90*)

The American flag was first displayed in a foreign port from the mast of the American schooner, *Bedford*, of Massachusetts, which arrived in the British Downs, February 3, 1783.

Old Glory first floated over a fortress in the old world when Lieut. Presley N. O'Bannon, of the United States marines, displayed it over the Tripolitan fortress at Derne, on the north coast of Africa, April 27, 1805.

It is a remark of disrespect to allow the flag to fly throughout the night.

The flag means more, even in its colors, than some comprehend. The red was chosen to denote defiance and daring, the white, purity of purpose, and the blue, eternal vigilance, perseverance in the right and justice for all.—*Two Bells*.

Pistol Team Defeats Cadets

THE Delaware and Hudson Police Pistol Team opened the 1934 season by defeating the United States Military Academy and the 156th Field Artillery squads in a triangular match at West Point, Saturday afternoon, April 28th. The match was fired at the "L" target with its five-inch bull's-eye. Despite a gusty, quartering wind, our marksmen scored 1474 out of a possible 1500, the Cadets fired 1425, while the 156th followed with 1331. GRATCOFSKY'S 298, just two points below a perfect score, was high for the afternoon. Our low man's total of 293 was four points higher than the best single score of the other two teams competing.

The individual rankings were: Delaware and Hudson, GRATCOFSKY 298, MASKO 295, OVERBAUGH 295, PENNINGTON 293, RUSS 293, total 1474; United States Military Academy, Williamson 289, Gould 287, Penn 285, McKee 283, McKinney 281, total 1425; 156th Field Artillery, Huddleson 277, Walker 274, Bennett 263, Forbush 259, and Lockhead 258, total 1331.

Three extra Delaware and Hudson men also fired in the match with the understanding that only the highest five scores were to be considered. ADRIANCE, a new member of the force stationed at Wilkes-Barre, rated 292, HERRON shot 289, and DISNEY scored 278.

In a recent number of *The American Rifleman*, official publication of the National Rifle Association, an All-American Revolver Team was listed. OVERBAUGH of the Delaware and Hudson police was rated the fourth best shot in the United States while GRATCOFSKY ranked seventh.

Practical Experience

The club members were bidding farewell to one who was leaving for India. In the conversation, a friend said: "It gets pretty hot in India at times. Aren't you afraid the climate might disagree with your wife?"

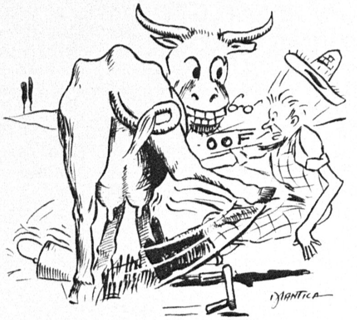
The man looked at him reproachfully.

"It wouldn't dare."

ACCIDENTS Will Happen !!

Some Common (and Uncommon) Causes of Injury to Employees

Illustrated by Frank Mantica



THE quotation "the *dearest* spot on earth to me is home sweet home" takes on new significance as the result of an analysis just completed by the Delaware and Hudson Group Insurance Statistical Bureau covering all accidents to insured employees while off duty. Records compiled during the last eleven years were consulted in order to determine the most common causes of accidents, as well as several of the more unusual variety, many of which are given here in the hope that, being mindful of the possibility of accident, members of the Delaware and Hudson family may, by exercising greater care, avoid the suffering and expense that follow most mishaps of this sort.

Falls lead the list, with icy sidewalks the cause of the greatest number. Falls while going up or down stairs come next, followed by falls from ladders. Among the less common types classified with this group are found cases where the employee slipped and fell in the bath tub, while in one instance he fell from a chair. (Moral, don't make your chair "rear up" on its hind legs—it's bad for the chair and may not be so good for you if the floor is slippery or the chair is weak.)

Automobile accidents, while not properly to be classed as among the dangers of a well-regulated home, rate next after falls as off-duty accident producers. In this group collisions with other vehicles or stationary objects took the lead, followed by "being struck by automobile" (while playing the part of the pedestrian). Items "cranking," and "making repairs" lead to the conclusion that it might have been better to have traded in the old "bus" after all!

Injuries resulting from contact with objects, either by striking against them or by being struck by them formed the next group in the series, of which the most unusual was that of an employee who had the misfortune to be struck on the head by a falling icicle.

Next came injuries sustained while indulging in sports of various kinds. Of fourteen branches included, baseball led, with swimming second. Football came next, an injury being reported in April for what is commonly thought of as a fall sport.

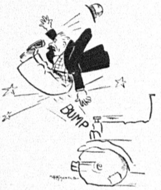
Under the heading of "household duties," which comes next in order, chopping and sawing wood are leading offenders, with "tending the garden" following. Here we find cases of "hand caught in washing machine," "electric shock from radio," "opening can," and "needle through hand." The most unusual was the case of the individual who was temporarily incapacitated by being struck by a falling water glass.

Burns, lacerations and wounds are grouped under the next heading, the "Glorious Fourth" apparently contributing such items as "explosion of toy cannon," "firecracker exploding in hand" and "explosion of discarded bullet."

The necessity for knowing your animals is emphasized by the listing in the next class of all mishaps in connection with our four-footed friends,

Recipients of kicks by horses and cows are grouped here, as are those who suffered dog bites. A runaway horse contributed to at least one injury while another case cites the fact that the victim was ignominiously "dragged by a calf."

Under the miscellaneous classification which concludes the tabulation are given a number of unusual causes of claims for accident insurance. Among them are a few selected at random: "knee displaced during sleep," "acting as bearer at funeral," "race between two fire companies," "struck by lightning," "fishbone in throat," and "chair was removed when about to sit down." This last is one of the lowest types of "practical joke" and may result in permanent serious injury to the victim.



Records kept over a long period of years by the insurance companies show that there is a much greater chance of injury to a person off duty than while at work. When you figure that you are off duty twice as long as you are at work, even if you have a seven-day job, which is rare, this sounds reasonable.

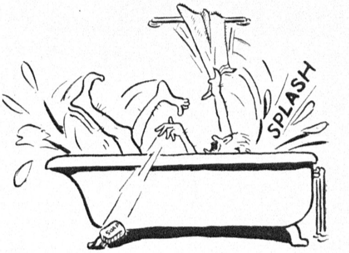
The latest figures furnished show that, of 9,692 Delaware and Hudson employees available for accident insurance to protect them from the possibility of suffering from such accidents as were listed above, 8,341, or 86 out of every hundred had this protection. In addition, 85 of the 86 held Accidental Death and Dismemberment Insurance providing double benefits in the event of death by accident.

Are you one of the fourteen or fifteen unprotected employees? If you are, do you know that you can have accident insurance enabling you to draw $15 a week for as long as 26 weeks in case of *injury received while not on duty* by paying only 21 cents a month; less than a cent a day?

And do you know that Accidental Death and Dismemberment Insurance equal to the amount of life insurance you now hold may be obtained by paying only 2 cents per hundred dollars per month?

No physical examination is required of holders of other forms of Delaware and Hudson Group Insurance, the only requirement being the filling out of Stencil Form No. 646 on which the employee certifies that, on the date of application for additional insurance, he or she is actively at work, on full time, for full pay, in apparently good health and not disabled or dismembered in any way.

Supervisors will obtain these forms from their superiors as required to meet the requests of any employees under their jurisdiction.



A Friend

AT a special function the conversation drifted to the subject of friendship. An athlete remarked: "In my opinion, a friend is a balancing-pole that enables us to walk the tight rope of life without falling."

A physician present said: "I believe a friend may be likened to a soft bandage and a soothing ointment for the cuts and bruises of life."

And a guest in the jewelry business declared: "A friend is a golden link in the chain of life."

To a botanist it seemed, he said: "A friend is a vine that clings to us and hides the discrepancies and rough places in life."

To this the florist added: "Yes, and the greater the ruin, the closer a friend clings."

Then the woman in the corner, who by the lines in her face indicated that she was able to speak from experience, said solemnly: "A friend is one who comes in when the whole world goes out."—*Illustrated Incidents.*

A Tense Moment

Lawyer: "Did you see the automobile approaching the railroad track?"

Crossing watchman: "Yes, and I said, 'That is a nice car—wasn't it?' "

Clicks from the Rails

Rails 8,662 Feet Long

have been placed in the tracks of the German State Railway in the two-mile-long Brandleite tunnel, leaving about 650 feet at each end with rails of normal length. The use of such long rails is made possible by the fact that the temperature within the tunnel remains practically constant throughout the year. The rails were welded into 295-foot lengths before being taken into the tunnel. In this connection it may be added that the standard rails now used in Germany are 98 feet 4 inches long.

Free Railroad Rides

may be enjoyed by anyone who cares to make the day and a half trip across Viti Levu, the main island of the group of 250 islands which make up the colony of Fiji, in the South Pacific Ocean. The narrow-gauge railroad is operated by one of the largest sugar plantation companies in Fiji, and while it is used chiefly to transport sugar cane, anyone may ride its trains without charge.

The Angling Club

of a little English town, having dined and wined, moved off with as much steadiness and dignity as possible when closing time came, to the bridge from which they were to fish that night. Seating themselves on the parapet they cast their lines and "fished" steadily until the dawn was breaking. Suddenly, with a roar, the first down-train swept under the bridge.

Five Tons of Copper

sheathing are being used to recover the dome of the Canadian National Railway's Winnipeg station, the area of which is 10,000 square feet. The copper used weighs approximately a pound to the square foot. It is estimated that this new covering will last for fifty years.

Free Theatre Tickets

and auctions of livestock were used by the Berlin-Potsdam Railway back in 1840 in an effort to boost declining passenger revenues. One theatre at which free performances were given for passengers was built at Steglitz, now part of greater Berlin. Shortly after the opening of the line, in 1838, on which trains attained a speed of 22 miles per hour, one passenger complained that something should be done to protect passengers from being molested by crippled beggars hobbling along beside the trains on their crutches.

Long Locomotive Runs

are being instituted on the Trans-Australian Railway between Port Augusta and Kalgoorlie, a distance of 1,051 miles, in the interests of economy. Previously this run was divided into four sections; now only two locomotives are used; the first running 513 miles while the second covers the remaining 538. These long runs are only exceeded by a limited number in Canada and the United States.

An Engineer Was Blinded

in one eye when one of a flock of chickens flew against the cab window breaking it, and showering the interior of the cab with splinters of glass. The train was an express operating between Kralup and Prague, Austria, and was approaching the latter terminal when it encountered the chickens on the track.

A Live Fish

recently leaped out of a drinking fountain in the Kensington Station, Chicago, when a Miami-bound passenger leaned over it to take a drink. The traveler, who was making the trip to fish in southern waters, considered this an omen of successful angling.

A White Ptarmigan

recently alighted on the running board of a Canadian National locomotive between Hudson Bay Junction and The Pas, Manitoba, and sat there while the train ran mile after mile through wind and snow, despite the frequent ringing of the bell and blasts of the whistle. Finally the engineman brought it into the cab to prevent its freezing and, at the conclusion of his run, when the bird showed no disposition to leave the cab, he took it home.

An Ancient Envelope

recently arrived at the general offices of the Northwestern Pacific containing a letter from one of the company's agents, in the upper left hand corner of which appeared the name of the California Northwestern Railway Company, a line which ceased to exist in 1907. The envelope, one of an order for 10,000 filled in 1899, was the last of a supply the agent had received many years ago.

The Conscience Fund

of the Northern Pacific was increased by $1 received from a farmer living near Finlayson, Minn., recently, whose brother gave him a dozen salt herring which he had taken from the scene of a freight train wreck over 20 years ago. According to the letter of transmittal, he never felt quite right about it until he had mailed the railroad a check.

Squadrons of Wasps

threatened to upset the entire summer advertising campaign of the London and North Eastern Railway, of England, last year when they literally chewed up all the posters along the line, apparently because they liked the paste. A stationmaster mixed a quantity of disinfectant in the paste and thereafter the posters were left intact.

I WILL speak ill of no man, not even in matters of truth; but rather excuse the faults I hear charged upon others, and upon proper occasion speak all the good I know of everybody.—FROM "FRANKLIN'S JOURNAL."